

REMARKS

The Final Office Action mailed October 22, 2003 has been received and carefully reviewed. Claims 1-49 are pending in the application.

In paragraph 1 on page two of the Office Action, claims 1-11 and 36-49 were rejected under 35 U.S.C. §102(b) as being anticipated by Dierke (U.S. Patent No. 5,854,757). In paragraph 2 on page two of the Office Action, claims 12-35 were rejected under 35 U.S.C. §103(a) as being unpatentable over Dierke. In paragraph 3 on page three of the Office Action, claims 1-49 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pineda (U.S. Patent No. 5,701,263) in view of Mattela et al. (U.S. Patent No. 5,781,239).

Applicants respectfully traverse the rejections. Applicants respectfully submit that Dierke, Pineda and Mattela, alone or in combination, fail to disclose, teach or suggest Applicants invention. Applicants' invention, as recited in independent claims 1, 12, 25, 36 and 47, requires arranging discrete cosine transform equations into at least one collection of at least two discrete transform equations having at least two discrete cosine transform constants. Then, the discrete cosine transform "equations in the at least one collection" is scaled by "dividing each of the discrete cosine transform constants in the collection" by "one of the discrete cosine transform constants from the at least one collection." Finally, each of the scaled discrete cosine transform constants is represented with sums of powers-of-2 that are approximations for the scaled discrete cosine transform constants.

Dierke, Pineda and Mattela all fail to at least suggest each of the scaled discrete cosine transform constants being represented with sums of powers-of-2 that are approximations for the scaled discrete cosine transform constants. The Office Action asserts that Mattela teaches the representation of the scaled transform constants by sums of powers of 2 terms. Further, the Office Action stated that any number represented in binary is also represented in sums of powers of two.

Applicant does not acquiesce to the above Office Action assertions. However, even if these assertions are true, this characterization of Applicants' invention is inaccurate. Applicants' claims do not merely state that scaled coefficients are represented by sums of powers of 2. Rather, Applicants' claims require the scaled coefficients be represented with sums of powers-of-

2 that are approximations for the scaled discrete cosine transform constants. In contrast, Mattela clearly converts scaled coefficients to binary equivalents. The binary equivalents may then be truncated. However, Mattela does not suggest approximating scaled coefficients. While Applicants' scaled coefficients represented with sums of powers-of-2 that are approximations for the scaled discrete cosine transform constants do not provide the accuracy of converting scaled coefficients to binary equivalents, Applicants' process provides advantages in speed.

For at least this reason, Applicants' invention, as recited in independent claims 1, 12, 25, 36 and 47, are patentable over Dierke, Pineda and Mattela.

However, Dierke, Pineda and Mattela also all fail to suggest that the discrete cosine transform equations in the at least one collection are scaled by dividing each of the discrete cosine transform constants in the collection by one of the discrete cosine transform constants from the at least one collection. Applicant maintains that Dierke merely discloses that each row is scaled with its own scaling factor.

The Office Action states that all of the transform constants in a collection do not have to be scaled by the same constant. However, this is clearly inaccurate. The claim language clearly requires each collection be scaled by a transform constant from that collection. Dierke, Pineda and Mattela all fail to suggest this limitation also.

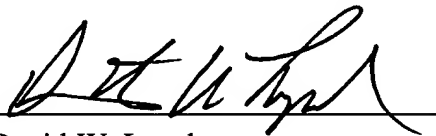
Because claims 2-11, 13-24, 26-35, 37-46, and 48-49, which depend directly or indirectly from claim 1, 12, 25, 36 and 47 respectively, and include the features recited in the independent claims as well as additional features, Applicant respectfully submits that claims 2-11, 13-24, 26-35, 37-46, and 48-49 are also patentably distinct over the cited references. Nevertheless, Applicants are not conceding the correctness of the Office Action's rejection with respect to such dependent claims and reserve the right to make additional arguments if necessary.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 651-686-6633 Ext. 116.

Respectfully submitted,

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